

REMARKS

In the June 3, 2005 Office Action, the Examiner noted that claims 1-4, 6-9 and 12-33 were pending in the application; rejected claims 1-4, 6-9, 12-23, 26, 29, 32 and 33 under 35 USC § 102(e); and rejected claims 24, 25, 27, 28, 30 and 31 under 35 USC § 103(a). In rejecting the claims, U.S. Patents 5,689,567 to Miyauchi (Reference A in the June 3, 2005 Office Action) and 6,292,092 to Chow et al. (Reference A in the June 16, 2004 Office Action) were cited. Claims 2-5, 7-23, 25, 26 and 28-33 have been cancelled and claims 34-37 have been added. Thus, claims 1, 6, 24, 27 and 34-37 remain in the case. The Examiner's rejections are traversed below.

Rejections under 35 USC § 102(e)

In items 3-13 on pages 2-4 of the Office Action, claims 1-4, 6-9, 12-23, 26, 29, 32, and 33 were rejected under 35 USC § 102(e) as anticipated by Miyauchi. In rejecting claims 1 and 9, column 4, lines 38-67, "steps" S11-S15 in Fig. 1a and "steps 14-17" in Fig. 2 were cited. As discussed in the September 16, 2004 Amendment, what is disclosed in these portions of Miyauchi is input of a signature image G using a scanner or a stored electronic file (column 3, lines 14-21), secret information (secret-key S) of the signer and "signature object document M" (Fig. 1, step S11). The signature image may be "a print of a seal, a written signature, a fingerprint, or the like in digital form" (column 4, lines 40-41). A hash operation (e.g., the MD5 message-digest algorithm) is applied to the object document M to generate a hash value H. The signature image then undergoes two encryption operations, first using hash value H and then using the secret-key S of the user (see, column 4, lines 46-67 and column 5, lines 4-12). These operations are also described at column 3, lines 22-51. The decryption operation is described in the second half of column 5 of Miyauchi.

Nothing was cited in Miyauchi suggesting that the MD5 message-digest algorithm or any encryption program is obtained from a "system presenting a receiver with signature information of a user" (claim 1, lines 1-2). Claim 1 recites that such a system produces "output information including a signature **program** ... [that] generates ... blind information from illegal use prevention information for protection against illegal use" (claim 1, lines 5-9, emphasis added). On the contrary, Miyauchi discloses using a conventional encryption-key/ public-key using a **predetermined** hash function to generate a hash value in an authenticating device, i.e., on a receiving side. As in conventional public key systems, the receiving side of the system disclosed by

Miyauchi requires the public key and the hash function prior to or from a separate source than the source of signature information of a user.

For the above reasons, it is submitted that claims 1 and claim 6 which depends therefrom, patentably distinguish over Miyauchi.

Furthermore, claim 6 recites additional details of the signature program. Since Miyauchi does not disclose outputting any kind of signature program, it is submitted that claim 6 further distinguishes over Miyauchi due to the details recited therein.

Rejections under 35 USC § 103(a)

In items 15-16 on pages 5 and 6 of the Office Action, claims 24, 25, 27, 28, 30 and 31 were rejected under 35 USC § 103(a) as unpatentable over Miyauchi in view of Chow et al.

In the last full paragraph on page 5 of the Office Action, it was asserted that Miyauchi disclosed "outputting the output information and the signature program" (claim 24, next-to-last line) at column 4, lines 46-67, "steps 14-17" in Fig. 2 and "steps S12-S15" in Fig. 1a. However, as discussed above with respect to claim 1, no suggestion that a "signature program" is output has been found in the cited portion of column 4, or the cited blocks of Figs. 1a and 2 in Miyauchi. All that is disclosed by Miyauchi is outputting a "signature document $X=g_1(A,S)$ " (see blocks S14 and S15 of Fig. 1a). Nothing has been cited or found anywhere in Miyauchi that the signature document X includes a program as recited in claim 24.

In the paragraph spanning pages 5 and 6 of the Office Action, it was acknowledged that Miyauchi does not disclose that the output information and the signature program were output "in a format readable by a bar code reader" (claim 24, last 2 lines). However, it was asserted that Chow et al. disclosed this feature at column 3, lines 1-3, column 4, lines 63-67 and column 7, lines 57-63. The cited portion of column 4 of Chow et al. only describes a "combination of ... personal information and a digitized descriptor of the photograph and/or personal information ... which after encrypting ... is recorded" (column 4, lines 62-65), e.g., as a "two-dimensional bar code" (column 3, line 1). The cited portion of column 7 of Chow et al. similarly describes a "fixed number, which is a digitized descriptor of the photograph (and/or personal signature if used), [that] is ... combined with the digitized personal information or code resulting from the hash function processed personal information, is encrypted and is fixed to the card" (column 7, lines 57-62). There is no suggestion in either of these passages of modifying the system taught by Miyauchi to record a **program** in a bar code or to output any kind of program in any way. Since claim 27 similarly recites "outputting information for generation of the signature information

according to the input identification information, including a signature program, in a format readable by a bar code reader" (claim 27, lines 4-6), it is submitted that claims 24 and 27 patentably distinguish over Miyauchi in view of Chow et al. for the reasons discussed above.

New Claims

Claim 34 has been added to recite additional features of the invention that are not taught or suggested by the combination of Miyauchi and Chow et al. As recited in claim 34, "a comparison unit ... [generates] second blind information from said illegal use prevention information contained in the signature information, and ... [compares] the second blind information with the first blind information contained in the signature information" (claim 34, lines 2-4). Nothing has been cited or found in Miyauchi and Chow et al. suggesting that the signature information contains both "blind information" and "illegal use prevention information" from which what should be the same "blind information" can be generated for comparison with the blind information in the signature information. Therefore, it is submitted that claim 34 patentably distinguishes over Miyauchi and Chow et al. because it depends from claim 1 and further patentably distinguishes over Miyauchi and Chow et al. due to the additional limitations recited therein.

Claim 35 has been added to recite that a "one-directional function and [an] encryption key ... are registered by a user" (claim 35, line 3). No suggestion has been found that Miyauchi and Chow et al. teach or suggest registering one-directional functions to specific users for "generating second blind information from the authentication information contained in the signature information, using the one-directional function" (claim 35, lines 6-7).

Furthermore, claim 36 recites that the "signature information ... contains illegal use prevention information and third blind information generated from the illegal use prevention information" (claim 36, lines 2-4) and that "fourth blind information [is] generated from the illegal use prevention information contained in the signature information" (claim 36, lines 5-6) for comparison with the third blind information in the signature information. As discussed above with respect to claim 34, this is not taught or suggested by Miyauchi and Chow et al.

Claim 37 recites receiving "from the user, authentication information and the first blind information generated from authentication information" (claim 37, lines 2-3) and comparing "the first blind information with ... third blind information" (claim 37, lines 6-7) generated "from the illegal use prevention information contained in the signature information" (claim 37, lines 4-5) which also is not taught by Miyauchi and Chow et al. For all of the above reasons, it is submitted that claims 34-37 patentably distinguish over Miyauchi and Chow et al.

Summary

It is submitted that the references cited by the Examiner, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1, 6, 24, 27 and 34-37 are in a condition suitable for allowance.

Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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